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APPLICATION NO.	FILING	) DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO:
09/761,253	09/761,253 01/16/2001		Zhenhua Wang	PHCH 000002	5183
24737	7590	10/21/2003		EXAM	INER
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P.O. BOX 30	001				
BRIARCLIFF MANOR, NY 10510				ART UNIT	PAPER NUMBER
	,	•		2816	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		- AN
	Application No.	Applicant(s)
Office Assistance	09/761,253	WANG, ZHENHUA
Office Action Summary	Examiner	Art Unit
The MAIL INC. DATE of the	Quan Tra	2816
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be tiry within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed  /s will be considered timely. In the mailing date of this communication. ED (35 U.S.C. & 133)
1) Responsive to communication(s) filed on 29 /	<u>August 2003</u> .	
	is action is non-final.	
3) Since this application is in condition for allows closed in accordance with the practice under	ance except for formal matters, p	rosecution as to the merits is 453 O.G. 213.
Disposition of Claims  4)⊠ Claim(s) 1-19 and 21-25 is/are pending in the	application	
4a) Of the above claim(s) is/are withdraw		
5)⊠ Claim(s) <u>15-17,19,22 and 25</u> is/are allowed.	without consideration.	
6)⊠ Claim(s) <u>1,3-5,18 and 21</u> is/are rejected.		
7) Claim(s) 2,14,16,23 and 24 is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement	
Application Papers	r oloollon roquillonioni.	
9)☐ The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ accept	oted or b) objected to by the Exa	miner.
Applicant may not request that any objection to the		
11)☐ The proposed drawing correction filed on	_ is: a)∏ approved b)∏ disappro	oved by the Examiner.
If approved, corrected drawings are required in re	·	
12) The oath or declaration is objected to by the Ex	aminer.	
Priority under 35 U.S.C. §§ 119 and 120		
13)⊠ Acknowledgment is made of a claim for foreigr	n priority under 35 U.S.C. § 119(a	)-(d) or (f).
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority document	s have been received.	
2. Certified copies of the priority document		
<ul> <li>3. Copies of the certified copies of the prior</li> <li>application from the International Bu</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	•
14) Acknowledgment is made of a claim for domesti		
a) ☐ The translation of the foreign language pro	visional application has been rec	eived.
Attachment(s)	- F. S. N. S. Marie 30 0.0.0. 33 120	GINGROT IZI.
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)

### **DETAILED ACTION**

This office action is in response to the Amendment filed August 29, 2003. Applicant's arguments have been fully considered but they are not persuasive. The rejection in previous office action is maintained.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 3-5, 18, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Lim (US Patent 5,319,265).

Regarding claim 1, Lim discloses in Fig. 2 a voltage level monitoring circuit comprising: a first reference current (the current flowing through RB); a second reference current (IB); a controllable switch (SW1); a monitoring current (the current flowing through RA) derived from a voltage (VIN) to be measured; a comparator device (u1) including a first current input (+ input) coupled for receiving the first reference current (the current through RB) in response to the controllable switch being nonconductive; and for receiving both the first and the second currents (the current through RB and -IB) in response to the controllable switch being conductive; a second input (input) for receiving the monitoring current; and at least one measuring signal output (Vout); the comparator device (u1) is arranged for comparing the currents received at

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the inputs and for generating at the output a measuring signal with a first value when the current received at its second input is less than that at the first input, and with a second value when the current at the second input is more than that at the first input.

Regarding claim 3, the current output of the second reference current source (IB) is coupled to the comparator device through the controllable switch (SW1).

Regarding claim 4, Fig. 2 shows that the switch (SW1) is controlled by a control signal generated by the comparator device (u1).

Regarding claim 5, the control signal (output of u1) renders the switch conductive when the current at the first input (+ input) is higher than that at the second input (input) and nonconductive when the current at the first input is less than that of the second input.

Claims 18 and 21 are rejected for the same reasons set forth in the rejections to claims 1, 3 and 5 above.

#### Allowable Subject Matter

3. Claims 2, 6-13, 23 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15, 16, 19, 22 and 25 are allowed.

Reasons: Claim 2 would be allowable because the prior art does not teach or suggest the first reference current source include a PIVIOS transistor (50 in Fig. 2) connected as recited in the claim in combination with the rest of limitations in the claim. Claim 6 would be allowable because the prior art does not teach or suggest the second reference current source include the PIVIOS transistor (60 in Fig. 2) connected as recited in the claim. Claim 7 would be allowable

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because the prior art does not teach or suggest the controllable switch (70 in Fig. 2) as recited in the claim. Claims 8-9, 19, and 22 contain allowable subject matter because the prior art does not teach or suggest the two inverters (80, 83) as recited in the claims. Claims 10-14 would be allowable because the prior art does not teach or suggest details of the monitoring current source (41, 42, 49 in Fig. 2) as recited in the claims. Claims 15-17 would be allowable because the prior art does not teach or suggest the current source being "programmable." Claims 23-25 would be allowable because the prior art does not teach or suggest the reference current source (5) is electrically connected in parallel to the series connection of the second current source and the switch 7.

#### Response to Arguments

Applicants argues "the second current reference IB does not flow into the non-inverting input (+) of the comparator U1 in response to switch SW1 being conductive". The Examiner respectfully disagrees. Lim's figure 2 shows the non-inverted terminal of U1 receives a current that having negative polarity with IB when switch SW1 closed. Similarly, Applicant's figure 2 also shows the input of 80 receives a current with opposite polarity of IM, and claim 1 recites "a second current input (12) coupled for receiving the monitor current (IM)". Therefore, Lim's comparator U1 is receiving the current IB when switch SW1 is closed because Lim's the current IB having the same direction as Applicant's IM which received by inverter 80.

#### Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 703-308-6174. The examiner can normally be reached on 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

QT

October 15, 2003

Terry D. Cunningham

Primary Examiner